



8-6-04

41

3762

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Gust H. Bardy et al.

Confirmation No.: 3720

Serial No.: 10/013,980

Examiner: K. Schaetzle

Filing Date: November 5, 2001

Group Art Unit: 3762

Docket No.: 1201.1135101

Customer No.: 28075

For: SUBCUTANEOUS ELECTRODE WITH IMPROVED CONTACT SHAPE  
FOR TRANSTHORACIC CONDUCTION (as amended)**TRANSMITTAL SHEET**Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**RECEIVED**  
AUG 10 2004  
TECHNOLOGY CENTER R3700

Sir:

**CERTIFICATE UNDER 37 C.F.R. 1.10:** The undersigned hereby certified that this paper or papers, as described herein are being deposited in the United States Postal Service, "Express Mail Post Office to Addressee" having an Express Mail mailing label number of: EV 314494984 US, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 5th day of August 2004

By Kathleen L. Bookley  
Kathleen L. Bookley

We are transmitting herewith the attached:

- [XX] Amendment  
[XX] No additional claim fee required  
[ ] The claim fee has been calculated as shown:

CLAIMS AS AMENDED							
	(3)	(4)	(5)	SMALL ENTITY		OTHER	
	REMAINING CLAIMS	HIGHEST PAID	EXTRA	RATE	ADD'L FEE	RATE	ADD'L FEE
TOTAL CLAIMS	-	=		X 9=	\$	X 18=	\$
INDEPENDENT CLAIMS	-	=		X 43=	\$	X 86 =	\$
( ) FIRST MULTIPLE DEPENDENT CLAIM				+ 145 =	\$	+ 290 =	\$
TOTAL				\$		\$	

[ ] A check in the amount of \$\_\_\_\_\_ is enclosed. Itemization:

Fee Code \_\_\_\_\_ \$

Fee Code \_\_\_\_\_ \$

Fee Code \_\_\_\_\_ \$

[XX] Small entity status of this application under 37 C.F.R. §§ 1.9 and 1.27 has been established.

[XX] Other: COPY OF OIPE DATE-STAMPED POSTCARD, COPY OF MARCH 11, 2004 INFORMATION DISCLOSURE STATEMENT, COPY OF MARCH 11, 2004 FORM PTO-1449, 38 SHEETS OF REPLACEMENT DRAWINGS, STATEMENT UNDER 37 C.F.R. § 1.125, MARKED-UP SPECIFICATION, AND CLEAN SUBSTITUTE SPECIFICATION.

[XX] Return Receipt Postcard (MPEP 503).

[XXXX] Please charge any deficiencies or credit any overpayment in the enclosed fees to Deposit Account No. 50-0413.

By: \_\_\_\_\_

J. Scot Wickhem, Reg. No. 41,376

J. Scot Wickhem  
CROMPTON, SEAGER & TUFTE, LLC  
1221 Nicollet Avenue, Suite 800  
Minneapolis, MN 55403-2420  
Telephone: (612) 677-9050  
Facsimile: (612) 359-9349



P A T E N T

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Gust H. Bardy et al. Confirmation No.: 3720  
Serial No.: 10/013,980 Examiner: K. Schaetzle  
Filing Date: November 5, 2001 Group Art Unit: 3762  
Docket No.: 1201.1135101 Customer No.: 28075  
For: SUBCUTANEOUS ELECTRODE WITH IMPROVED CONTACT SHAPE  
FOR TRANSTHORACIC CONDUCTION (as amended)

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RECEIVED**  
AUG 10 2004  
TECHNOLOGY CENTER R3700

**STATEMENT UNDER 37 CFR § 1.125**

**CERTIFICATE UNDER 37 C.F.R. 1.10:** The undersigned hereby certified that this paper or papers, as described herein are being deposited in the United States Postal Service, "Express Mail Post Office to Addressee" having an Express Mail mailing label number of: EV 314494984 US, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 5th day of August 2004

By Kathleen L. Bookley  
Kathleen L. Bookley

Dear Sir:

This Statement is accompanying a marked up specification and a clean substitute specification. Pursuant to 37 CFR § 1.125(b), Applicants hereby state that the substitute specification contains no new matter.

Respectfully submitted,

Gust H. Bardy et al.

By their attorney,

Date: August 5, 2004

J. Scot Wickhem  
J. Scot Wickhem, Reg. No. 41,376  
CROMPTON, SEAGER & TUFTE, LLC  
1221 Nicollet Avenue, Suite 800  
Minneapolis, Minnesota 55403-2420  
Telephone: (612) 677-9050  
Facsimile: (612) 359-9349

# COPY

Customer Copy  
Label 11-F June 2002



EV 315613325 US



UNITED STATES POSTAL SERVICE®

Post Office To Addressee

ORIGIN (POSTAL USE ONLY)				DELIVERY (POSTAL USE ONLY)			
PO ZIP Code 55401	Day of Delivery <input type="checkbox"/> Next <input checked="" type="checkbox"/> Second <input type="checkbox"/>	Flat Rate Envelope <input type="checkbox"/>		Delivery Attempt Mo. Day Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature		
Date In 3 11 04	<input checked="" type="checkbox"/> 12 Noon <input type="checkbox"/> 3 PM	Postage \$ 39.20		Delivery Attempt Mo. Day Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature		
Time In 7:30 AM	Military <input type="checkbox"/> 2nd Day <input type="checkbox"/> 3rd Day	Return Receipt Fee		Delivery Date Mo. Day Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature		
Weight 10.13 lbs.	Int'l Alpha Country Code	COD Fee	Insurance Fee	<input type="checkbox"/> WAIVER OF SIGNATURE (Domestic Only) Additional merchandise insurance is void if waiver of signature is requested. I wish delivery to be made without obtaining signature of addressee or addressee's agent (if delivery employee is not present, this article can be left in secure location) and I authorize that delivery employee's signature and proof of delivery.			
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday	Acceptance Clerk Initials JMC	Total Postage & Fees \$ 39.20		NO DELIVERY <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday			
CUSTOMER USE ONLY METHOD OF PAYMENT: Express Mail Corporate Acct. No. X531006				Federal Agency Acct. No. or Postal Service Acct. No.			
FROM: (PLEASE PRINT) CROMPTON SEADER & TUFTS LLC 1221 NICOLLET AVE STE 800 MINNEAPOLIS MN 55403-2445 1201.1135101 DMC/k1b				TO: (PLEASE PRINT) XXXXXXXXXXXX COMMISSIONER FOR PATENTS PO BOX 1430 ALEXANDRIA VA 22313-1430			
PRESS HARD. You are making 3 copies. FOR PICKUP OR TRACKING CALL 1-800-222-1811 www.usps.com							

This will hereby acknowledge receipt of the following documents by the Assist. Comm. of Patents and Trademarks:

Transmittal Letter, Information Disclosure Statement, Form PTO-1449 and 134 cited references

with respect to the following:

Applicant: Gust H. Bardy et al.

Serial No.: 10/013,980

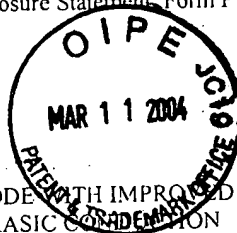
Filing Date: November 5, 2001

For: SUBCUTANEOUS ELECTRODE WITH IMPROVED CONTACT SHAPE FOR TRANSTHORASIC CORRELATION

Docket No.: 1201.1135101

DMC/k1b

03/11/2004 via Express Mail Label No. EV 315613325 US



**COPY**  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Gust H. Bardy et al. Confirmation No.: 3720  
Serial No.: 10/013,980 Examiner: K. Droesch  
Filing Date: November 5, 2001 Group Art Unit: 3762  
Docket No.: 1201.1135101 Customer No.: 28075  
For: SUBCUTANEOUS ELECTRODE WITH IMPROVED CONTACT SHAPE FOR  
TRANSTHORASIC CONDUCTION

**INFORMATION DISCLOSURE STATEMENT**

**CERTIFICATE UNDER 37 C.F.R. 1.10:** The undersigned hereby certified that this paper or papers, as described herein are being deposited in the United States Postal Service, "Express Mail Post Office to Addressee" having an Express Mail mailing label number of: EV 315613325 US, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of March 2004.

By Kathleen L. Boekley  
Kathleen L. Boekley

Dear Sir:

Pursuant to the obligations of candor and good faith imposed by 37 C.F.R. § 1.56, the documents listed on the attached PTO-1449 are hereby disclosed.

No representation is intended to be made hereby that any of the cited references establishes, by itself or in combination with other information, a prima facie case of unpatentability of any claim of the present case.

Respectfully submitted,

Gust H. Bardy et al.

By their Attorney,

David M. Crompton

David M. Crompton, Reg. No. 36,772  
CROMPTON, SEAGER & TUFTE, LLC  
1221 Nicollet Avenue, Suite 800  
Minneapolis, MN 55403-2420  
Telephone: (612) 677-9050  
Facsimile: (612) 359-9349

Date: 3/11/04

**COPY**

<b>FORM PTO-1449</b>	Atty. Docket No.: 1201.1135101	Serial No.: 10/013,980
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	Applicant: Gust H. Bardy et al.	
	Customer No.: 3720	
	Filing Date: November 5, 2001	Group Art: 3762

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document No.	Date	Name	Filing Date If Appropriate
AA	H1,905	10/03/2000	Hill	
AB	3,653,387	04/04/1972	Ceier	
AC	3,710,374	01/09/1973	Kelly	
AD	3,911,925	10/14/1975	Tillery, Jr.	
AE	4,157,720	06/12/1979	Greatbatch	
AF	4,191,942	03/04/1980	Long	
AG	4,223,678	09/23/1980	Langer et al.	
AH	4,248,237	02/03/1981	Kenny	
AI	4,291,707	09/29/1981	Heilman et al.	
AJ	4,314,095	02/02/1982	Moore et al.	
AK	4,402,322	09/06/1983	Duggan	
AL	4,407,288	10/04/1983	Langer et al.	
AM	4,424,818	01/10/1984	Doring et al.	
AN	4,450,527	05/22/1984	Sramek	
AO	4,567,900	02/04/1986	Moore	
AP	4,602,637	07/29/1986	Elmqvist et al.	
AQ	4,603,705	08/05/1986	Speicher et al.	
AR	4,693,253	09/15/1987	Adams	
AS	4,765,341	08/23/1988	Mower et al.	
AT	4,800,883	01/31/1989	Winstrom	
AU	4,830,005	05/16/1989	Woskow	
AV	4,944,300	07/31/1990	Saksena	
AW	5,105,810	04/21/1992	Collins et al.	
AX	5,109,842	05/05/1992	Adinolfi	

COPY

Examiner Initial	Document No.	Date	Name	Filing Date If Appropriate
AY	5,129,392	07/14/1992	Bardy et al.	
AZ	5,133,353	07/28/1992	Hauser	
BA	5,144,946	09/08/1992	Weinberg et al.	
BB	5,184,616	02/09/1993	Weiss	
BC	5,191,901	03/09/1993	Dahl et al.	
BD	5,203,348	04/20/1993	Dahl et al.	
BE	5,230,337	07/27/1993	Dahl et al.	
BF	5,255,692	10/26/1993	Neubauer et al.	
BG	5,261,400	11/16/1993	Bardy	
BH	5,300,106	04/05/1994	Dahl et al.	
BI	5,331,966	07/26/1994	Bennett et al.	
BJ	5,342,407	08/30/1994	Dahl et al.	
BK	5,366,496	11/22/1994	Dahl et al.	
BL	5,376,103	12/27/1994	Anderson et al.	
BM	5,376,104	12/27/1994	Sakai et al.	
BN	5,385,574	01/31/1995	Hauser et al.	
BO	5,391,200	02/21/1995	KenKnight et al.	
BP	5,405,363	04/11/1995	Kroll et al.	
BQ	5,411,539	05/02/1995	Neisz	
BR	5,411,547	05/02/1995	Causey, III	
BS	5,413,591	05/09/1995	Knoll	
BT	5,423,326	06/13/1995	Wang et al.	
BU	5,476,503	12/19/1995	Yang	
BV	5,509,923	04/23/1996	Middleman et al.	
BW	5,509,928	04/23/1996	Acken	
BX	5,531,765	07/02/1996	Pless	
BY	5,531,766	07/02/1996	Kroll et al.	
BZ	5,534,019	07/09/1996	Paspa	
CA	5,534,022	07/09/1996	Hoffmann et al.	
CB	5,597,956	01/28/1997	Ito et al.	

COPY

Examiner Initial	Document No.	Date	Name	Filing Date If Appropriate
CC	5,601,607	02/11/1997	Adams	
CD	5,603,732	02/18/1997	Dahl et al.	
CE	5,618,287	04/08/1997	Fogarty et al.	
CF	5,620,477	04/15/1997	Pless et al.	
CG	5,643,328	07/01/1997	Cooke et al.	
CH	5,645,586	07/08/1997	Meltzer	
CI	5,658,317	08/19/1997	Haefner et al.	
CJ	5,658,321	08/19/1997	Fayram et al.	
CK	5,674,260	10/07/1997	Weinberg	
CL	5,690,648	11/25/1997	Fogarty et al.	
CM	5,690,683	11/25/1997	Haefner et al.	
CN	5,697,953	12/16/1997	Kroll et al.	
CO	5,713,926	02/03/1998	Hauser et al.	
CP	5,766,226	06/16/1998	Pedersen	
CQ	5,776,169	07/07/1998	Schroeppel	
CR	5,814,090	09/29/1998	Latterell et al.	
CS	5,836,976	11/17/1998	Min et al.	
CT	5,895,414	04/20/1999	Sanchez-Zambrano	
CU	5,919,211	07/06/1999	Adams	
CV	5,919,222	07/06/1999	Hjelle et al.	
CW	5,925,069	07/20/1999	Graves et al.	
CX	5,935,154	08/10/1999	Westlund	
CY	5,941,904	08/24/1999	Johnston et al.	
CZ	6,014,586	01/11/2000	Weinberg et al.	
DA	6,026,325	02/15/2000	Weinberg et al.	
DB	6,058,328	05/02/2000	Levine et al.	
DC	6,093,173	06/25/2000	Balceta et al.	
DD	6,095,987	08/01/2000	Shmulewitz et al.	
DE	6,128,531	10/03/2000	Campbell-Smith	
DF	6,144,866	11/07/2000	Miesel et al.	



COPY

Examiner Initial	Document No.	Date	Name	Filing Date If Appropriate
DG	6,185,450	02/06/2001	Seguine et al.	
DH	6,411,844	06/25/2002	Kroll et al.	
DI	6,647,292	11/11/2003	Bardy et al.	
DJ	2001/027330 A1	10/04/2001	Sullivan et al.	
DK	2002/0035381	03/21/2002	Bardy et al.	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Translation Yes No
DL	DE 298 01 807 U1	07/16/1998	Germany	Yes
DM	EP 0 095 727 A1	12/07/1983	Europe	
DN	EP 0 316 616 A2,3	05/24/1989	Europe	Yes
DO	EP 0 347 353 A1	12/20/1989	Europe	Yes
DP	EP 0 517 494 A3	12/09/1992	Europe	
DQ	EP 0 517 494 B1	12/09/1992	Europe	
DR	EP 0 518 599 A2	12/16/1992	Europe	
DS	EP 0 518 599 B1	12/16/1992	Europe	
DT	EP 0 536 873 B1	04/14/1993	Europe	
DU	EP 0 586 858 B1	03/16/1994	Europe	
DV	EP 0 627 237 A1	12/07/1994	Europe	
DW	EP 0 641 573 A2	03/08/1995	Europe	
DX	EP 0 641 573 A3	03/08/1995	Europe	
DY	EP 0 677 301 A1	10/18/1995	Europe	
DZ	EP 0 917 887 A1	05/26/1999	Europe	
EA	EP 0 923 130 A1	06/16/1999	Europe	Yes
EB	EP 1 000 634 A1	05/17/2000	WIPO	Yes
EC	WO 93/19809 A1	10/14/1993	WIPO	
ED	WO 97/29802 A2	08/21/1997	WIPO	
EE	WO 98/25349 A1	06/11/1998	WIPO	
EF	WO 99/03534 A1	01/28/1999	WIPO	

COPY

		Document No.	Date	Country	Translation Yes No
EG		WO 99/37362 A1	07/29/1999	WIPO	
EH		WO 99/53991 A1	10/28/1999	WIPO	
EI		WO 00/41766 A1	07/20/2000	WIPO	
EJ		WO 00/50120 A1	08/31/2000	WIPO	
EK		WO 01/43649 A1	06/21/2001	WIPO	
EL		WO 01/56166 A2	08/02/2001	WIPO	
EM		WO 02/22208 A2	03/21/2002	WIPO	
EN		WO 02/22208 A3	03/21/2002	WIPO	
EO		WO 02/24275 A2	03/28/2002	WIPO	
EP		WO 02/24275 A3	03/28/2002	WIPO	
EQ		WO 02/068046 A1	09/06/2002	WIPO	
ER		WO 03/018121 A2	03/06/2003	WIPO	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

ES	U.S. Patent Application Serial No. 09/663,607 to Bardy et al., filed September 18, 2000.
ET	Friedman, Richard A. et al., "Implantable Defibrillators In Children: From Whence to Shock," <u>Journal of Cardiovascular Electrophysiology</u> , Vol. 12, No. 3, March 2001, pp. 361-362.
EU	Gradaus, Rainer et al., "Nonthoracotomy Implantable Cardioverter Defibrillator Placement in Children: Use of Subcutaneous Array Leads and Abdominally Placed Implantable Cardioverter Defibrillators in Children," <u>Journal of Cardiovascular Electrophysiology</u> , Volume 12, No.3, March 2001, pp. 356-360.
EV	Mirowski, M. et al., "Automatic Detection and Defibrillation of Lethal Arrhythmias-A New Concept," <u>JAMA</u> , Vol. 213, No. 4, July 27, 1970, pp. 615-616.
EW	Olson, Walter H. et al., "Onset and Stability for Ventricular Tachyarrhythmia Detection in an Implantable Pacer-Cardioverter-Defibrillator," <u>IEEE</u> , (1987) pp. 167-170.
EX	Schuder, John C., "Completely Implanted Defibrillator," <u>JAMA</u> , Vol. 214, No. 6, November. 9, 1970. p. 1123 (single sheet).
EY	Schuder, John C., "The Role of an Engineering Oriented Medical Research Group in Developing Improved Methods and Devices for Achieving Ventricular Defibrillation: The University of Missouri Experience," <u>PACE</u> , Vol. 16, January 1993, pp. 95-124.
EZ	Schuder, John C. et al., "Experimental Ventricular Defibrillation with an Automatic and Completely Implanted System," <u>Trans. Amer. Soc. Artif. Int. Organs</u> , Vol. XVI (1970) pp. 207-212.
FA	Schuder, John C. et al., "Standby Implanted Defibrillators," <u>Arch Intern. Med</u> , Vol. 127, February 1971, p. 317 (single sheet).

COPY

FB	Schuder, John C. et al., "Transthoracic Ventricular Defibrillation in the Dog with Truncated and Untruncated Exponential Stimuli," <u>IEEE Transactions on Bio-Medical Engineering</u> , Vol. BME-18, No. 6, November 1971, pp. 410-415.
FC	Tietze U. et al., "Halbleiter-Schaltungstechnik," ©Springer-Verlag (Berlin, Germany), (1991), pp. 784-786.
FD	Walters, R.A. et al., "Analog to Digital Conversion Techniques in Implantable Devices," <u>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</u> , Vol. 13 No. 4 (1991) Pg. 1674-1676.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.